Entrez PubMed
Overview
Help | FAQ
Tutorials
New/Noteworthy
E-Utilities

PubMed Services
Journals Database
MeSH Database
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
Special Queries
LinkOut
My NCBI

Related Resources
Order Documents
NLM Mobile
NLM Catalog
NLM Gateway
TOXNET
Consumer Health
Clinical Alerts
ClinicalTrials.gov
PubMed Central

1. Lorentsen RH, Fynbo CH, Thøgersen HC, Etzerodt M, Holtet TL. Related Articles, Links

Expression, refolding, and purification of recombinant human granzyme B.
Protein Expr Purif. 2005 Jan;39(1):18-26.
PMID: 15596356 [PubMed - indexed for MEDLINE]

2. Li R, Rüttinger D, Urba W, Fox BA, Hu HM. Related Articles, Links

Targeting and amplification of immune killing of tumor cells by pro-Smac.
Int J Cancer. 2004 Mar;109(1):85-94.
PMID: 14735472 [PubMed - indexed for MEDLINE]

3. Liu Y, Cheung LH, Hittelman WN, Rosenblum MG. Related Articles, Links

Targeted delivery of human pro-apoptotic enzymes to tumor cells: In vitro studies describing a novel class of recombinant highly cytotoxic agents.
Mol Cancer Ther. 2003 Dec;2(12):1341-50.
PMID: 14707275 [PubMed - indexed for MEDLINE]

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	49787	(site or motif or sequence or target) near4 (cleavage or cleave or cleaved)	US-PGPUB; USPAT	ADJ	OFF	2007/12/18 20:13
L2	89	(site or motif or sequence or target) near4 (granzyme b)	US-PGPUB; USPAT	ADJ	OFF	2007/12/18 20:13
L3	80	(granzyme b) near4 (cleavage or cleave or cleaved)	US-PGPUB; USPAT	ADJ	OFF	2007/12/18 20:13
L4	4412	l1 near8 (fusion protein)	US-PGPUB; USPAT	ADJ	OFF	2007/12/18 20:14
L5	2	l1 and l2 and l3 and l4	US-PGPUB; USPAT	ADJ	OFF	2007/12/18 20:14

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTASXS1656

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 AUG 06 CAS REGISTRY enhanced with new experimental property tags
NEWS 3 AUG 06 FSTA enhanced with new thesaurus edition
NEWS 4 AUG 13 CA/CAplus enhanced with additional kind codes for granted patents
NEWS 5 AUG 20 CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 6 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 7 AUG 27 USPATOLD now available on STN
NEWS 8 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 9 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 10 SEP 13 FORIS renamed to SOFIS
NEWS 11 SEP 13 INPADOCDB enhanced with monthly SDI frequency
NEWS 12 SEP 17 CA/CAplus enhanced with printed CA page images from 1967-1998
NEWS 13 SEP 17 CAplus coverage extended to include traditional medicine patents
NEWS 14 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 15 OCT 02 CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS 16 OCT 19 BEILSTEIN updated with new compounds
NEWS 17 NOV 15 Derwent Indian patent publication number format enhanced
NEWS 18 NOV 19 WPIX enhanced with XML display format
NEWS 19 NOV 30 ICSD reloaded with enhancements
NEWS 20 DEC 04 LINPADOCDB now available on STN

```
 NEWS 21  DEC 14  BEILSTEIN pricing structure to change
 NEWS 22  DEC 17  USPATOLD added to additional database clusters
 NEWS 23  DEC 17  IMSDRUGCONF removed from database clusters and STN
 NEWS 24  DEC 17  DGENE now includes more than 10 million sequences
 NEWS 25  DEC 17  TOXCENTER enhanced with 2008 MeSH vocabulary in
                  MEDLINE segment
 NEWS 26  DEC 17  MEDLINE and LMEDLINE updated with 2008 MeSH
vocabulary
 NEWS 27  DEC 17  CA/CAplus enhanced with new custom IPC display
formats
 NEWS 28  DEC 17  STN Viewer enhanced with full-text patent content
                  from USPATOLD

 NEWS EXPRESS  19 SEPTEMBER 2007:  CURRENT WINDOWS VERSION IS V8.2,
               CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
 NEWS IPC8     For general information regarding STN implementation
of IPC 8

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * *
* *

FILE 'HOME' ENTERED AT 20:19:57 ON 18 DEC 2007

=> File Medline EMBASE Biosis Caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                    0.21       0.21

FILE 'MEDLINE' ENTERED AT 20:20:14 ON 18 DEC 2007

FILE 'EMBASE' ENTERED AT 20:20:14 ON 18 DEC 2007
Copyright (c) 2007 Elsevier B.V. All rights reserved.

FILE 'BIOSIS' ENTERED AT 20:20:14 ON 18 DEC 2007
Copyright (c) 2007 The Thomson Corporation

FILE 'CAPLUS' ENTERED AT 20:20:14 ON 18 DEC 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
```

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

=> s (site or motif or sequence or target) (4A) (cleavage or cleave or cleaved)
L1 52623 (SITE OR MOTIF OR SEQUENCE OR TARGET) (4A) (CLEAVAGE OR CLEAVE
OR CLEAVED)

=> s (site or motif or sequence or target) (4A) (granzyme b)
L2 335 (SITE OR MOTIF OR SEQUENCE OR TARGET) (4A) (GRANZYME B)

=> S (granzyme b) (4A) (cleavage or cleave or cleaved or cleaving or cleaves)
L3 296 (GRANZYME B) (4A) (CLEAVAGE OR CLEAVE OR CLEAVED OR CLEAVING OR
CLEAVES)

=> S l1 (8A) (fusion protein)
L4 745 L1 (8A) (FUSION PROTEIN)

=> S l1 and l2 and l3 and l4
L5 4 L1 AND L2 AND L3 AND L4

=> duplicate
ENTER REMOVE, IDENTIFY, ONLY, OR (?):remove
ENTER L# LIST OR (END):l5
DUPLICATE PREFERENCE IS 'MEDLINE, EMBASE, BIOSIS, CAPLUS'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L5
L6 1 DUPLICATE REMOVE L5 (3 DUPLICATES REMOVED)

=> d l6 bib ab

L6 ANSWER 1 OF 1 MEDLINE on STN DUPLICATE 1
AN 2004034626 MEDLINE
DN PubMed ID: 14735472
TI Targeting and amplification of immune killing of tumor cells by pro-Smac.
AU Li Rui; Ruttinger Dominik; Urba Walter; Fox Bernard A; Hu Hong-Ming
CS Laboratory of Cancer Immunobiology, Earle A Chiles Research Institute,
Providence Portland Medical Center, Portland, OR 97213, USA.
NC R01 CA92254 (NCI)
SO International journal of cancer. Journal international du cancer, (2004
Mar) Vol. 109, No. 1, pp. 85-94.
Journal code: 0042124. ISSN: 0020-7136.
CY United States

DT Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
(RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)
LA English
FS Priority Journals
EM 200403
ED Entered STN: 22 Jan 2004
Last Updated on STN: 13 Mar 2004
Entered Medline: 12 Mar 2004
AB Overexpression of inhibitors of apoptosis (IAP) is one potential mechanism for tumor cells to evade immune surveillance. To determine whether immune-mediated killing of tumor cells can be enhanced by neutralization of IAP proteins, 2 novel eGFP-Smac fusion proteins (pro-Smac) were introduced into the poorly immunogenic mouse melanoma cell line, B16BL6-D5 (D5). Each fusion protein contained Smac and a cleavage site specific for granzyme B (GrB) or caspase 8, thereby targeting the 2 major killing mechanisms of cytotoxic T-lymphocyte (CTL) and NK cells. Expression of a pro-Smac fusion protein by D5 tumor cells greatly enhanced the susceptibility to killing by lymphokine-activated killer (LAK) cells or purified GrB. GrB-mediated killing was increased to a much greater extent when tumor cells expressed the eGFP-Smac fusion protein with a GrB cleavage site compared to a caspase 8 cleavage site. In contrast, perforin-deficient LAK cells, which lack GrB-mediated cytotoxicity but process normal ligands for death receptors, killed D5 tumor cells expressed pro-Smac with caspase 8 cleavage site more efficiently. Enhanced killing by GrB was also accompanied by processing of the fusion protein and increased caspase-3-like activity. These results indicate that killing of tumor cells can be amplified by targeting cell-mediated cytotoxic mechanisms via expression of pro-Smac fusion proteins.